

Purchase Order Receipt Listing

Friday, January 27, 2017 2:33:53 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO35031 All Receipt Dates All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M/ Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID/Vendor Name VC-COP001 Thyssenkrupp Materials CA Ltd											
PO35031	1		M174R0.750 f	f	1/27/2017	1/27/2017	14.2000	\$6.65	0.0000	0	\$94.46
CAD	No		17-4 round bar .750 f	f	14.2000	QUIR01		\$94.46	0.0000	0	
			M136697								
	2		M303R0.500 f	f	1/27/2017	1/27/2017	24.0000	\$1.98	0.0000	0	\$47.53
	No		303 Round Bar 0.500"	f	24.0000	QUIR01		\$47.53	0.0000	0	
			M136697								
	3		M303R0.750 f	f	1/27/2017	1/27/2017	12.0000	\$4.46	0.0000	0	\$53.47
	No		303 Round Bar 0.750 f	f	12.0000	QUIR01		\$53.47	0.0000	0	
			M136697								
	4		M303R1.000 f	f	1/27/2017	1/27/2017	12.0000	\$6.76	0.0000	0	\$81.18
	No		303 Round Bar 1.00 f	f	12.0000	QUIR01		\$81.18	0.0000	0	
			M136697								
	5		M6061T6B0.375X01. f	f	1/27/2017	1/27/2017	12.0000	\$3.41	0.0000	0	\$40.96
	No		6061T6 BAR .375 x 1.00	f	12.0000	QUIR01		\$40.96	0.0000	0	
			M136697								
	6		M6061T6B0.500X06. f	f	1/27/2017	1/27/2017	12.0000	\$8.00	0.0000	0	\$95.99
	No		6061-T6 Bar .500 x 6.00	f	12.0000	QUIR01		\$95.99	0.0000	0	
			M136697								
	7		M6061T6B0.500X12. f	f	1/27/2017	1/27/2017	12.0000	\$15.81	0.0000	0	\$189.74
	No		6061-T6 Bar .500 x 12.00	f	12.0000	QUIR01		\$189.74	0.0000	0	
			M136697								

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID \ Vendor Name VC-COP001 Thyssenkrupp Materials CA Ltd											
PO35031	8		M6061T6B0.750X00. f 750		1/27/2017	1/27/2017	12.0000	\$3.41	0.0000	0	\$40.96
CAD	No		6061-T6 Bar .750 x f .750		12.0000	QUIR01		\$40.96	0.0000	0	
			M136697								
	9		M6061T6B00750X00 f .125		1/27/2017	1/27/2017	120.0000	\$0.41	0.0000	0	\$49.16
	No		6061-T6 Bar .750 x f .125		100.0000	QUIR01		\$49.16	0.0000	0	
			M136697								
	10		M6061T6B2.000X01. f 250		1/27/2017	1/27/2017	12.0000	\$6.70	0.0000	0	\$80.36
	No		6061-T6 Bar 2.00 x f 1.25		12.0000	QUIR01		\$80.36	0.0000	0	
			M136697								
	11		M7075T6B7.000X2.0 f 00		1/27/2017	1/27/2017	6.6900	\$78.82	0.0000	0	\$527.32
	No		7075-T6 BAR 7.000" f X 2.000" (order in billets - 13.375")		6.6900	QUIR01		\$527.32	0.0000	0	
			M136697								
	12		71401-45		1/27/2017	1/27/2017	1.0000	\$0.00	0.0000	0	\$0.00
	No		PROCUREMENT QUALITY CLAUSES		1.0000	QUIR01		\$0.00	0.0000	0	
			M136697								
Total Received Quantity:											249.8900
Total Qty to Inspect (PO U/M):											0.0000
Total Reject Quantity:											0.0000
Total Receipt Value:											\$1,301.12
Total Balance Due Quantity:											0.0000

B I L L O F L A D I N G

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

No: PEC 27450
Ship Date 23Jan17 at 10:59 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G

6) Our Order PEC- 8887- 6 Your PO # 35031
ALUMINUM FLAT BAR 6061-T6511

.50" X 6.00" X 144.0000"

Heat Number
201621892

Tag No
610524

Quantity
12 FT

PCS 1 Wt LBS 42

7) Our Order PEC- 8887- 7 Your PO # 35031
ALUMINUM FLT BAR ECONOPLT 6061-T6511

.500" X 12.00" X 144.0000"

Heat Number
Z00108144

Tag No
610525

Quantity
12 FT

PCS 1 Wt LBS 84

8) Our Order PEC- 8887- 8 Your PO # 35031
ALUMINUM SQUARE BAR 6061-T6511

.750" X 144.0000"

Heat Number
201610858

Tag No
610527

Quantity
12 FT

PCS 1 Wt LBS 9

9) Our Order PEC- 8887- 9 Your PO # 35031
ALUMINUM FLAT BAR 6061-T6511

.125" x .750" X 240.0000"

Heat Number
429847-4

Tag No
610528

Quantity
100 FT

PCS 5 Wt LBS 11

10) Our Order PEC- 8887- 10 Your PO # 35031
ALUMINUM FLAT BAR 6061-T6511

1.250" x 2.00" X 144.0000"

Heat Number
201617706

Tag No
610529

Quantity
12 FT

PCS 1 Wt LBS 36

11) Our Order PEC- 8887- 12 Your PO # 35031
Part # ** FROM PLATE *** Rel #
ALUMINUM PLATE 7075-T651 DOMESTIC
2.00" THICK X 7.0000" X 13.3750"

Page: 2Continued

ALUMINIUM - L'ALUMIN - CUIVRE - PLASTIQUE - ACIER INOX
ALUMINUM - BRASS - COPPER - PLASTICS - STAINLESS

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.
MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

B I L L O F L A D I N G

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

No: PEC 27450
Ship Date 23Jan17 at 10:59 From PFW
Probill
Via VIM DELIVERY
FOB CONCORD
Frt PREPAID
Route 0- 0 Manifest
Vhcle Trailer
Slp STAN IVERS (905-532-1350)
Sold To: (20115)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7

Ship To: (1)
DART AEROSPACE
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Tel: 613-632-9577 Fax: 613-632-1053

B I L L O F L A D I N G

1) Our Order PEC- 8887- 1 Your PO # 35031
STAINLESS STEEL ROUND BAR 17-4 STAINLESS
.750" DIA X 170.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
800644	610517	14 ' 2.0000 "	1	21

2) Our Order PEC- 8887- 2 Your PO # 35031
STAINLESS STEEL ROUND BAR 303 STAINLESS
.50" DIA X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
428558	610518	24 FT	2	15

3) Our Order PEC- 8887- 3 Your PO # 35031
STAINLESS STEEL ROUND BAR 303 STAINLESS
.750" DIA X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
100D	610519	12 FT	1	18

4) Our Order PEC- 8887- 4 Your PO # 35031
STAINLESS STEEL ROUND BAR 303 STAINLESS
1.00" DIA X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
428705	610520	12 FT	1	33

5) Our Order PEC- 8887- 5 Your PO # 35031
ALUMINUM FLAT BAR 6061-T6511
.375" x 1.00" X 144.0000"

Heat Number	Tag No	Quantity	PCS	Wt LBS
201621178	610522	12 FT	1	6

Page: 1Continued

ALUMINIUM - L'ATON - CUIVRE - PLASTIQUE - ACIER INOX
ALUMINUM - BRASS - COPPER - PLASTICS - STAINLESS

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
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REÇU EN BONNE CONDITIONS / RECEIVED IN GOOD CONDITION

DATE

TVQ/QST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

Ship From:
THYSSENKRUPP MATERIALS NA
2821 LANGSTAFF ROAD
CONCORD, ONTARIO L4K 5C6
Tel: 905 669 9444 Fax: 905-738-9033

B I L L O F L A D I N G

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Sold To: (20115)
DART AEROSPACE

Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G
GRAIN DIRECTION ALONG THE 13.375 INCH DIM ****

Heat Number	Tag No	Quantity	PCS	Wt LBS
9346164	610586	3.90 SFT	6	118

TOTAL:	Tags 11	PCS 21	LBS 393
--------	---------	--------	---------

Heat Number

*** Chemical Analysis ***

100D
201610858
201617706
201621178
428558
428705
429847-4
800644
9346164
Z00108144

MILL TEST REPORTS, PACKING SLIPS ARE TO SENT
WITH MATERIAL AND FAXED TO THE CUSTOMER PRIOR
TO SHIPPING.

ATTN: CHANTAL/LINDA

** ALL PACKING SLIPS MUST HAVE THE HEAT NUMBER **
** REFERENCED ON IT **

TOTAL 1 SKID, 2 BDLS GW. 443 LBS

*CUSTOMER PICK-UP HRS AT THYSSENKRUPP MATERIALS NA
CONCORD, ONT.* *** 9:00 AM TO 4:00 PM ***

**** TEL. 800-926-2600 ****

* WE STOCK STAINLESS STEEL *

* PLEASE LET US QUOTE YOUR NEXT REQUIREMENT *

Page: 3Continued

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
RAPPORTÉES IMMÉDIATEMENT.

ERRORS OR SHORTAGE MUST BE REPORTED IMMEDIATELY

RETOUR DE MARCHANDISES AVEC NOTRE NUMERO D'APPROBATION SEULEMENT.

MERCHANDISE MAY NOT BE RETURNED WITHOUT OUR APPROVAL NUMBER.

B I L L O F L A D I N G

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2821 LANGSTAFF ROAD
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Ship To: (1)
DART AEROSPACE

B I L L O F L A D I N G

***PLEASE NOTE A \$25.00 ENERGY SURCHARGE WILL BE
ADDED TO EVERY ORDER.***

***UNE SURCHARGE D'ENERGIE DE \$25.00

SERA AJOUTEE A CHAQUE COMMANDE.***

***POUR VOS BESOINS D'ACIER INOXYDABLE,

CONTACTEZ-NOUS. NOUS L'AVONS! TEL. 800-926-2600

Page: 4 Last

ALUMINIUM - LANTAN - CUIVRE - PLASTIQUE - ACIER INOX
ALUMINUM - BRASS - COPPER - PLASTICS - STAINLESS

TOUTES ERREURS ET/OU MARCHANDISES MANQUANTES DOIVENT ÊTRE
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DATE

TVQ/QST# 1017327981 TQ001 TPS/GST TVH/HST # 140223934 RT0001

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 17-4 STAINLESS
.750" DIA X 170.0000"
PART NO.

PO/Rel 35031

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-027450-001

23Jan17

Signed by: 

Pg 1/1

AMBICA

INSPECTION CERTIFICATE

Certificate Type : EN 10204 / 3.1

Our Sales Order No.	100308	Invoice No.	1516110470	Certificate No.	1516-0006043
Customer Order No.	PEC-268804	Invoice Date	09.01.2016	Date	09.01.2016

Customer
Thyssenkrupp Materials Na
2821 Langstaff Rd.
Concord, Ontario L4K 5C8
Ontario L4K 5C8
Canada

Trade Mark

ASSL

Inspector's Mark

ASS1

Material Details	Stainless Steel Round Bar Centerless Ground & Polished			Solution Annealed	
Steel Grade	17-4PH	Shape	Round	Size	0.7500 inch
Heat No.	800644	Tolerance	A-484 (CF)	Length of Bars	144-166 inch
Net Weight	974.61 LBS	Number of Bars	46	Melting Process	EF / AOD / MEMS
Bundle No.	AH-4859				
Requirements	AMS 5643T:2013	ASTM A 564:2013	NACE MR D175 / ISO 15156:2009		

Chemical Analysis %

	C	Si	Mn	P	S	Cr	Mo	Fe	Cu	Nb							
Min.						15.300		3.000	3.000	0.150							
Max.	0.070	1.000	1.000	0.040	0.030	17.500	0.500	5.000	5.000	0.450							
Melt	0.042	0.300	0.790	0.038	0.025	15.870	0.312	4.100	3.180	0.242							

Mechanical Properties

	YS/(Rp 0.2%) (N/mm ²)	UTS (N/mm ²)	% Elongation	% Reduction Area	Hardness (BHN)	Charpy Impact V Notch (Longitudinal) (Joules)			
	ASTM A 370:2014	ASTM A 370:2014	ASTM A 370:2014	ASTM A 370:2014	ASTM A 370:2014	Temp. Deg (C)	1	2	3 Avg.
Min.									
Max.									
Results	998.690	1102.350	15.100	52.200	326.000				

Heat Treatment:

Solution Annealed @ 1900°F. Soaking for 1hr-20mins & Oil Quenching to below 90°F.

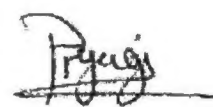
DAS
14
9-89

17/01/27

Remarks:

- * Country Of Origin Of Goods - India
- * Free from Radioactivity - verified through Gamma Ray Spectrometer
- * No Mercury Contamination
- * No welding has been performed on the material
- * Visual & Dimensional Inspection - OK
- * Material Identification tested through X-ray based portable Spectrometer
- * RoHS Compliance
- * H-900 Capability test report
- * YS = 1198.60 N/mm²
- * UTS = 1398.00 N/mm²

- * EL % = 18.10
- * RA % = 51.10
- * Hardness = 416 BHN



QA Head / NDT Inspector

We confirm that the material is manufactured & supplied in accordance to the Purchase Order

Ambica Stainless Steel Limited

A-1/1, Wazirpur Industrial Area, New Delhi 110032 India Tel.: +91(120)4564585-88 Email: info@assl.co.in Web: www.ambicastainless.com CIN: U27100DL2004PLC131284

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 303 STAINLESS
 .50" DIA X 144.0000"
 PART NO.

PO/Rel 35031

We certify that this is a true copy of the report
 furnished by the producer of the metal, or data
 resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-027450-002

23Jan17

Signed by: 

Pg 1/2



Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
 Telefono 0444.988211 - Fax 0444.983836
 Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37
 Telefono 0471.924111 - Fax 0471.924497

CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: EN 10204 (2004), 3.1

Certificato nr. MEST955824 / 2016 /
 Prüfung/Test/Essai

Cliente / Besteller/Purchaser/Cient
 VALBRUNA CANADA LTD
 8724 HOLGATE CRESCENT
 L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Stato di fornitura: Hot rolled - Annealed Cold Drawn
 Lieferzustand
 Delivery state
 Etat de livraison

Produttore:
 Hersteller/Hersteller/producer
STABILIMENTO DI BOLZANO

Ordine nr: 608005939 Stock - Canada
 Bestell
 Your order
 Commande

Tipo di Elaborazione: E+AOD
 Erzeugnisart
 Making process
 Mode d'élaboration

Marchi di Fabbrica:
 Zeichen des Lieferanten
 Trade marks
 Signes de l'usine productrice



Conferma ordine nr: EI16008423
 Verkaufs-Orderbestätigung

Qualità:
 Werkstoff/Grade/Qualität

303HS

Punzone del Collaudatore:
 Stempel des Werksachverständigen
 Inspector's stamp/Prüfer des Fabrik

MR

Avviso di Spedizione: D-BZ16007820
 Liefererscheinung

Marca: MV188ZHS MAXIVAL
 Markenbezeichnung
 Brand / Marque

Punzonatura: 303HS
 Kennzeichnung
 Marking
 Marquage

SPECIFICHE:

Note:

Anforderungen / Requirements / Exigences

Aufzeichnungen / Notes / Notes

VSI D 303 HS A,CF
 AISI 303
 AMS 5840 V S30300 A
 AMS 5840 V TYPE1 A
 ASME SA320 2015 B8F (0)
 ASTM A314 2015 S30300
 ASTM A320 2015A B8F (1)
 ASTM A370 2015
 ASTM A582 2012 S30300 A
 MIL-S-882-B/1 303
 QQ-S-764 B/2 303 A

(0)SECTION II P.T.A 2015 EDITION Chemical analysis only.

(1)Chemical analysis only.

DAS
 14
 9-89

17/01/27

Tolleranza: ASTM A484-16 TABLE 7

Tolleranza/Allowance/Tolerance

Pos. nr. Pos. n. Item nr. No. de pièce	Oggetto Object Produit description Designation du produit	Dimensioni - In Dimensions Dimensions Größen	Lunghezza - In Length Länge Länge	Colata Schmelze Melt Guss	Pezzi Blöcke Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lot Lot nr. Lot nr.
0010	Round	0,5000	146/ 146	428558		2.105	612201700

TEST ALLO STATO DI FORNITURA

Test on delivery condition Prüfung auf Lieferbereitem produkt test à l'état de fourniture Prueba sobre el material así como entregado

TEST	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.	Prove/Soll Specimens/Conformities Long short Spec. Short short Spec. Short short Spec. Long short Spec. Short short Spec.
	Yield strength Rp0.2%	Yield strength Rp0.2%	Yield strength Rp0.2%	Yield strength Rp0.2%	Yield strength Rp0.2%	Yield strength Rp0.2%	Yield strength Rp0.2%	Yield strength Rp0.2%	Yield strength Rp0.2%
	min	min	min	min	min	min	min	min	min
	max	max	max	max	max	max	max	max	max
A	8.75	68	L	88	110	25	49	228	140

Mechanical properties according to ASTM A370.

Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Schmelze	min max	0,030 0,060	0,20 1,00	1,50 2,00	17,00 18,00	- 0,05	- 1,20	8,00 10,00	- 0,100	0,32 0,4000	- -	- -	- -	- -	- -	- -	- -	- -	- -
	C %		Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	Zr %							
428558		0,036	0,43	1,83	17,75	0,55	0,61	8,12	0,103	0,030	0,32	0,0044							

Produced without class I-II Ozone depleting substances.
 Solution heat treated free from continuous carbide network.
 Micro and macro etch test: OK
 Reduction ratio = 176,7 : 1
 Annealing temperature: 1960° F for 0.5h/water.
 Material is DFARS Compliant

Bolzano, 15/11/16

BLD06 - MEST955824

(Mod. MCE2)

Il collaudatore di stabilimento / der Werksachverständige / Works inspector / L'agent d'usine

M. Rizzotti

Pagina - 1 di 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 303 STAINLESS
.50" DIA X 144.0000"
PART NO.

PO/Rel 35031

We certify that this is a true copy of the report
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BL PEC-027450-002

23Jan17

Signed by: 

Pg 2/2



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In conformità a: EN 10204 (2004), 3.1

Certificato nr. MEST955824 / 2016 /

Nicht/According to/Sehen

Prüfung/To test/Sehen

Cliente / Besteller/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Stato di fornitura: Hot rolled - Annealed Cold Drawn
Lieferzustand
Delivery state
Etat de livraison

Produttore:
Hersteller/Hersteller/producer
STABILIMENTO DI BOLZANO

Ordine nr. 606005939 Stock - Canada
Bestell
Your order
Commande

Tipo di Elaborazione: E+AOD
Erzeugnisart
Making process
Mode d'élaboration

Marchi di Fabbrica:
Zeichen des Lieferanten
Trade marks
Sigles de l'usine productrice



Conferma ordine nr. EI16008423
Werkz./Our Order/Ref. nr.

Qualità: 303HS
Werkstoff/Grade/Qualität

Punzone del Collaudatore:
Stempel des Werkstoffüberwacher/Inspector's stamp/Embossion de l'inspecteur

MR

Avviso di Spedizione: D-BZ16007820
Lieferanweisung/Packing Instruct.

Marca: MV188ZHS MAXIVAL
Markenbezeichnung
Brand / Marque

Punzonatura: 303HS
Kennzeichnung
Marking
Marquage

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind lt. Anlage erfüllt
The material has been furnished in accordance with the requirements
Le matériel a été fourni conforme aux exigences

Controllo antimescolanza: OK
Verwechslungsprüfung: spektralanalytisch durchgeführt
Antibatching testing performed: OK
Contrôle antimeslange fait: O.K.

Controllo visivo e dimensionale: soddisfa le esigenze
Beachtung und Ausmessung: ohne Beanstandung
Visual inspection and dimensional check: satisfactory
Contrôle visuel et dimensionnel satisfaisant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER ACCORDING TO ISO 9001 : 2008, ISO/TS16949 : 2009, AS 9100C

The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, s. 4.3 and 2014/68/EU by TÜV and LLOYD'S
Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.
Maxival and/or Valplus grades/products are manufactured with ladle techniques to control composition, distribution, size and shape of non-metallic inclusions for improved machinability.
The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

Bolzano, 15/11/16

BBL006 - MEST955824

(Mod. MCE2) www.valbruna.it

Il collaudatore di stabilimento / der Werkstoffüberwacher / Works inspector / L'agent d'usine

M. Rizzotto 

Pagina - 2 di 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL ROUND BAR 303 STAINLESS
1.00" DIA X 144.0000"
PART NO.

PO/Rel 35031

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-027450-004

23Jan17

Signed by:

Pg 2/2



Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.l.
Telefono 0444.988211 - Fax 0444.983838
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4/37
Telefono 0471.924111 - Fax 0471.924497

CERTIFICATO DI COLLAUDO - ABNAHMEPRUEFZEUGNIS - INSPECTION CERTIFICATE - CERTIFICAT DE RECEPTION

In conformità a: **EN 10204 (2004) , 3.1**

Certificato nr. **MEST911146 / 2016 /**

Yash/According to/Sehen

Prüfung/Inspection

Cliente / Besteller/Purchaser/Client
VALBRUNA CANADA LTD
8724 HOLGATE CRESCENT
L5T 5Z1 - MILTON, ONT L5T 5Z1 - CA

Stato di fornitura: **Hot rolled - Annealed Cold Drawn**
Lieferzustand
Delivery state
Etat de livraison

Produttore:
Hersteller/Hersteller producer
ACCIAIERIE VALBRUNA S.P.A.

Ordine nr: **604005710 Stock - Canada**

Bestell
Your order
Commande

Tipo di Elaborazione: **E+AQD**
Erweiterungsart
Milling process
Mode d'elaboration

Marchi di Fabbrica:
Zeichen des Lieferanten
Trade marks
Sigles de l'usine productrice



Conferma ordine nr: **EI16003312**

Verkauf/Order Ref.:

Qualità: **303HS**

Werkstoff/Grade/Alliance

Funzione del Collaudatore:
Stempel des Nachsachverständigen
Inspector's stamp/Funktion de l'inspecteur

MR

Avviso di Spedizione: **D-VI16019598**

Lieferanweisung/Packing note L.

Marca: **MV188ZHS MAXVAL**
Markenbezeichnung
Brand / Nuance

Paronzatura: **303HS**
Kennzeichnung
Marking
Marquage

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Micro and macro etch test: OK
Reduction ratio = 44,2 : 1
Material solution annealed 1070° C for 0.5h/water cooled.
Material is DFARS Compliant

Sono state soddisfatte tutte le condizioni richieste
Die gestellten Anforderungen sind in Anlage erfüllt
The material has been furnished in accordance with the requirements
Le matériel a été livré conforme aux exigences

Controllo antimiscelanza: OK
Vermischungsprüfung: spezialanalytisch durchgeführt
Anmischung being performed: OK
Contrôle antimélange fait, r.a.s.

Controllo visivo e dimensionale: soddisfatta le esigenze
Beurteilung und Abmessung: ohne Beanstandung
Visual inspection and dimensional checks satisfactory
Contrôle visuel et dimensionnel: satisfaisant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury contamination

We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.

QUALITY MANAGEMENT SYSTEM CERTIFIED BY LLOYD'S REGISTER ACCORDING TO ISO 9001 : 2008, ISO/TS16949 : 2009, AS 9100C

The Quality Management System is Certified acc. Pressure Equipment Directive '97/23/EC' Annex 1, s.4.3 and 2016/88/EU by TÜV and LLOYD'S
Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.

Maxval and/or Valplus grades/products are manufactured with ladle techniques to control composition, distribution, size and shape of non-metallic inclusions for improved machinability.

The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

Vicenza, 28/07/16

V00005 - MEST911146

(Mod. MGEZ) APPROVED BY THE SIGNATURE OF THE PRODUCER

Il collaudatore di stabilimento / der Werksachverständige / Works Inspector / L'agent d'usine

M. Rizzotto

Pagina - 2 di 2

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
ALUMINUM SQUARE BAR 6061-T6511
750" X 144.0000"
PART NO.

PO/Rel 35031

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by:

BL PEC-027450-008

23Jan17
Pg 1/1

Certificate of Mill Test Results



Can Do.

Service Center Metals
5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS

OUR ORDER NUMBER	ITEM
266822	7

BILL TO
ThyssenKrupp Materials NA-Concord, ON
SHIP TO
ThyssenKrupp Materials NA-Concord, ON
Quantity Certified 1,656 lbs 206 pcs
MANIFEST NUMBER 299073
CUSTOMER PO PEC-276004
CUSTOMER PART NUMBER TKM-1263
DATE OF SHIPMENT 6/21/2016
DIE NUMBER MSQ1260
ALLOY/TEMPER 6061-T6511
SALES PERSON D. Schroeder (Canada)
DESCRIPTION MSQ 750 + .010-.0
CERTIFICATION ASTM-B221-14 StencilCont
SPECIFICATION AMS-QQA-2008 Rev-A
SPECIFICATION
RoHS 2011/65/EU Compliant

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown.

Mechanical Properties

Tests Lot No.

12 201609136
5 201610858

Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
5/23/16	min 47.10 max 52.10	min 42.90 max 49.70	min 14.40 max 19.40
6/21/16	51.60	52.00	49.40 50.40 11.30 15.40

Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Each	Others	Total	Melt Source:
06101603	201610858	6061	0.71	0.35	0.30	0.10	0.87	0.15	0.08	0.02	97.42	0.05	0.15		United States of America
06111605	201610858	6061	0.77	0.37	0.31	0.10	0.87	0.09	0.07	0.02	97.40	0.05	0.15		United States of America

SCM extrusions are manufactured in the USA.

Print Date: 6/21/2016

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM PLATE 7075-T651 DOMESTIC
2.00" THICK X 7.0000" X 13.3750"
PART NO. ** FROM PLATE ****

PO/Rel 35031

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-027450-011

23Jan17

Signed by: *A*

Pg 1/2



Constellium



CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

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THYSSENKRUPP CA

2821 LANGSTAFF ROAD
CONCORD ON
L4K 5C6
CA

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THYSSENKRUPP CA

2821 LANGSTAFF ROAD
CONCORD ON
L4K 5C6
CA

PECKOVERS	110443240	4075	INCLUSION	Serial:20160721-0110443240	Pg 1of2
CUSTOMER PURCHASE ORDER NO. & ITEM PEC-276877			Constellium ORDER NO. 182320		
ALLOY 7075	CLAD	TEMPER T651	GUAGE 2.03000 in 51.56 mm	WIDTH 60.50000 in 1,537 mm	LENGTH 144.50000 in 3,670 mm
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH					
CUSTOMER SPECIFICATION AMS QQ-A-250/12A					
PART NUMBER		B/L NUMBER 64636		DATE SHIPPED 07/22/2016	
WT. SHIPPED 5550.000 LB		NO. OF PIECES 000003		GOVT. CONTRACT NO.	
<p>CERTIFICATION</p> <p>"Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination."</p> <p>Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA</p> <p><i>Steve Good</i></p> <p>Steve Good - Laboratory Manager</p>					

ALL LOTS ON THIS CERTIFICATION ALSO CONFORM TO THE FOLLOWING REQUIREMENTS:

AMS 4045K
ASTM B209-14

Load Details

Package	Net Lbs	Kg	Lot	Piece	Serial	Parent Lot
1001303129	1,850.000	839.145	9346164	03		
1001303130	1,850.000	839.145	9346164	01		
1001303130	1,850.000	839.145	9346164	02		

Lot: 9346164

Tensile - Room Temperature (US)

		Ultimate (KSI)		Yield (KSI)		Elongation (%)	
Direction	Tests	Min	Max	Min	Max	Min	Max
LT	02	79.9	80.3	70.2	71.0	12.5	13.5

Tensile - Room Temperature (SI)

		Ultimate (N/MM2)		Yield (N/MM2)		Elongation (%)	
Direction	Tests	Min	Max	Min	Max	Min	Max
LT	02	551	554	484	490	12.5	13.5

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM PLATE 7075-T651 DOMESTIC
2.00" THICK X 7.0000" X 13.3750"
PART NO. ** FROM PLATE ****

PO/Rel 35031

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-027450-011

23Jan17

Signed by: 

Pg 2/2



Constellium



CERTIFIED TEST REPORT
Constellium Rolled Products
Ravenswood, LLC

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THYSSENKRUPP CA


2821 LANGSTAFF ROAD
CONCORD ON
L4K 5C8
CA

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THYSSENKRUPP CA

2821 LANGSTAFF ROAD
CONCORD ON
L4K 5C8
CA

PECKOVERS		110443240		4075		INCLUSION		Serial:20160721-0110443240		Pg 2of2	
CUSTOMER PURCHASE ORDER NO. & ITEM PEC-276877						Constellium ORDER NO. 182320					
ALLOY 7075	CLAD	TEMPER T651	GAUGE 2.03000 in 51.56 mm	WIDTH 60.50000 in 1,537 mm	LENGTH 144.50000 in 3,670 mm	CERTIFICATION "Constellium Rolled Products, hereby certifies that metal shipped under this order has been inspected and found in conformance with the requirements of the applicable specifications as indicated herein. Any warranty is limited to that shown on Constellium Rolled Products' standard General Terms and Conditions of Sales. Test reports are on file, subject to examination." Constellium Rolled Products Ravenswood, LLC 859 Century Road P.O. BOX 68 RAVENSWOOD, WV 26164 USA  Steve Good - Laboratory Manager					
ITEM ORDERED SPEC PLATE, SAWED MILL FINISH											
CUSTOMER SPECIFICATION AMS QQ-A-250/12A											
PART NUMBER		B/L NUMBER 64636		DATE SHIPPED 07/22/2016							
WT. SHIPPED 5550.000 LB		NO. OF PIECES 000003		GOVT. CONTRACT NO.							
Chemistry (Actual)											
	SI	FE	CU	MN	MG	CR	ZN	TI	ZR		
Core	0.06	0.15	1.41	0.05	2.56	0.20	5.46	0.03	0.00		
OTHERS-EACH: .05 MAX. OTHERS TOTAL: .15 MAX. AL REMAINDER											
All material contained in this lot was cast and manufactured in the USA											
<p>THIS TEST REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE LABORATORY OR AUTHORIZED QUALITY DELEGATE. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW.</p> <p>CHEMISTRY BY OES: ARKSPARK CHEMISTRIES REPORTED IN PERCENTAGE BY WEIGHT WHEN FRACTURE TOUGHNESS TEST REQUIRED, TESTED PER ASTM E399 WHEN TENSILE TEST REQUIRED, TESTED PER ASTM E8; B557 DUNS Number: 090570149; CAGE Code: 1YW19</p> <p>Mercury is not a normal contaminant in aluminum alloys and neither mercury nor any of its compounds were utilized in the manufacture of our product.</p> <p>"END OF CERTIFICATION"</p>											
P-850-155D REVISED: 10 2014											

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLAT BAR 6061-T6511
.125" x .750" X 240.0000"
PART NO.

PO/Rel 35031

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-027450-009

23Jan17

Signed by: 

Pg 1/1

Attn:

CAN ART

ALUMINUM EXTRUSIONS INC.

Material Test Report

Manifest: 316387

Ship To: ThyssenKrupp Materials NA
2821 Langstaff Road
Concord, ON L4K 5C6

Ticket:
5506879

Our Order: 429847 - 4

Cust P.O.: 278787

Die: ES05485

Part: 05485-000-240

Alloy Temper: 6061 T6511

Description: .125 x .750

Print Date: 10/27/16

DAS
14
9-89

17/01/27

Chemical Composition Range

6061	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OtherEach	OtherTotal
Min	0.40		0.15		0.8	0.04				
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15

Mechanical Properties

Strength ksi

<u>Sample ID</u>	<u>Cast #</u>	<u>Lot #</u>	<u>Test Date</u>	<u>Ultimate Tensile</u>	<u>Yield 2% offset</u>	<u>Elongation 2" gage length</u>
424907	3B4184	A11	10/27/16	46.69	42.47	13.6

Applicable Specifications: ASTMB221-14 AMS-QQ-A200/8A

Country of Origin: 85 Parkshore Drive, Brampton, Ontario CANADA L6T 5M1

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

Siddharth Desai - Tensile Testing

Authorized:


Evan Eng, Quality Assurance Manager

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
ALUMINUM FLAT BAR 6061-T6511
3.75" x 1.00" x 144.0000"

PART NO.

P.O./Rel 35031

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

BL DEC-02/450-005

23 Jan 17
Pg 1/1

Certificate of Mill Test Results

Service Center Metals

5850 Quality Way
Prince George, VA 23875



CERTIFIED INSPECTION REPORT AND TEST RESULTS FOR EXTRUDED PRODUCTS



OUR ORDER NUMBER	ITEM
279703	15

BILL TO ThyssenKrupp Materials NA-Concord, ON	ALUMINUM NUMBER 315913	ONE NUMBER RB0081	DATE OF SHIPMENT 12/6/2016	CERTIFICATION ASTM-B221-14 StencilCont
SHIP TO ThyssenKrupp Materials NA-Concord, ON	CUSTOMER PO PEC-279601	ALLOY/TEMPER 6061-T6511	SALES PERSON D. Schroeder (Canada)	SPECIFICATION AMS-QQA-200/8 Rev-A
Quantity Certified 1,080 lbs 204 pcs	CUSTOMER PART NUMBER RB0081	DESCRIPTION SCRB .375x1.000		

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. This product is RoHS-2, REACH, and DEARS compliant.

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
2	201621177	12/3/16	min 43.40 max 44.20	min 37.80 max 38.50	min 17.40 max 18.30

Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Each	Others Total	Melt Source:
2K161104C	201621177	6061	0.64	0.24	0.22	0.06	0.86	0.07	0.01	0.02	97.87	0.05	0.15	United States of America

SCM products are melted and extruded in the USA

Print Date: 12/6/2016

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
STAINLESS STEEL ROUND BAR 303 STAINLESS
1.750" DIA X 144.0000"
PART NO.

PO/Rel 35031
We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Certificate of Mill Test Results
BL PEC-027450-003
23 Jan 17
Pg 1/1

NAS North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

METALLURGICAL TEST REPORT

6870 Highway 42 East
Cheney, KY 41045-9615
(502) 347-6000

Certificate: 216009 3 Mail To: THYSSENKRUPP MATERIALS
Customer: 007206 001 2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6
Date: 9/07/2016 Page: 1
Steel: 303
Finish: CD
Corrosion:

Your Order: PEC277672 NAS Order: IN 0236677 01

PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw
UNS 30300, ASTM A582/12 EN 10204 3.1, ASTM A484/15
AMS 5640V TYPE 1, Q98-764B CONDITION A
SOLUTION ANNEAL TEMP 1900F MIN
REMARKS:
COMPLIES W/REQUIREMENTS OF DEAR 252.225-7009 EU DIRECTIVE
2011/65/EU, ROHS, EAF-AOD-CC. NO WELD REPAIR. MELTED AND NPG
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skd # Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BI1735 6		1.7500	780	144.00	1	1	

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

HEAT	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
100D	US	.0328	.1455	17.1285	.3270	1.8445	.3050	.0345	8.6060	.0275

	S %	SI %								
	.3108	.5520								

MECHANICAL PROPERTIES

Product Id	1 d o f d f	HB No.	2YS KSI	UTS KSI	RA %	Elong % 4D
BI1735 6		HL 230.0	81.18	104.43	39.68	26.52

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical Dept. Mgr. 
KRIS LARK 9/07/2016

THYSSENKRUPP MATERIALS NA

DART AEROSPACE

ALUMINUM FLT BAR ECONOPLT 6061-T6511

.500" X 12.00" X 144.0000"

PART NO.

PO/Rel 35031

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Certificate of Mill Test Results

BL PEC-027450-007

23Jan17

Signed by: 

Pg 1/1

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
5205 KAISER DRIVE
KALAMAZOO, MI 49048

CUSTOMER PO NUMBER: PEC-278342-2		CUSTOMER PART NUMBER: W61/STK		PRODUCT DESCRIPTION: .500 X 12.000 PRECISION WIDE BAR	
KAISER ORDER NUMBER: 6017989	LINE ITEM: 002	SHIP DATE: 10/04/2016	KAISER LOT NUMBER: Z00108144	ALLOY: 6061	TEMPER: T6511
WEIGHT SHIPPED: 1016.000 LB	QUANTITY: 12.000 PCS	B/L NUMBER: 617037	DIA/M/DIA/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA			SOLD TO: THYSSENKRUPP CANADA 2821 LANGSTAFF ROAD CONCORD, ON L4K 5C6 CANADA		

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00108144	0001	0001	44.3	39.9	12.4	RE 94	N/A	N/A
Z00108144	0001	0002	43.9	39.5	12.5	RE 92	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
106598	.59	.26	.20	.07	.82	.06	.04	.02	.00	.00	.00	.01	.03

Applicable Requirements:

ASTM-B221-14 STENCILED ASME-SB221 2009 SECT II AMS-QQ-A-200/8A UNS#A96061 (T6511 also conforms to T6-not applicable to other tempers)

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY OF ITS COMPOUNDS ARE UTILIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager



Plant Serial: 00253478

Kaiser Order Number: 6017989

Line Item: 002

THYSSENKRUPP MATERIALS NA

DART AEROSPACE
ALUMINUM PLAT BAR 6061-T6511
1.250" x 2.00" x 144.0000"
PART NO.

PO/Rel 35031

We certify that this is a true copy of the report furnished by the producer of the metal, or data resulting from tests made in approved labs.

Signed by:

BL PEC-027450-010

23 Jan 17
Pg 1/1

Certificate of Mill Test Results



Can Be.

Service Center Metals
5850 Quality Way
Prince George, VA 23875

CERTIFIED INSPECTION REPORT AND TEST RESULTS

FOR EXTRUDED PRODUCTS



OUR ORDER NUMBER	ITEM
278856	13

BILL TO ThyssenKrupp Materials NA-Concord, ON	MANIFEST NUMBER 314603	DIE NUMBER MRB1792	DATE OF SHIPMENT 11/21/2016	CERTIFICATION ASTM-B221-14 StencilCont
SHIP TO ThyssenKrupp Materials NA-Concord, ON	CUSTOMER PO PEC-279340	ALLOY / TEMPER 6061-T6511	SALES PERSON D. Schroeder (Canada)	SPECIFICATION AMS-QQA-200/8 Rev-A
Quantity Certified 4,135 lbs 116pcs	CUSTOMER PART NUMBER MRB1792	DESCRIPTION MORB 1.250x2.000		

We hereby certify that the material covered by this report has been inspected in accordance with the most recent certification revision, and has been found to meet the applicable requirements described herein, including any specifications forming a part of the description, and that samples representative of the material met the composition limits and had the mechanical properties shown. This product is RoHS-2, REACH, and DfARS compliant.

Mechanical Properties

Tests	Lot No.	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation
6	201617706	10/13/16	min 51.40 max 51.90	min 47.90 max 48.60	min 15.15 max 17.25

Chemical Composition for Aluminum Alloy 6061

Cast #	Lot No.	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Each	Others	Total	Melt Source:
1K160930C	201617706	6061	0.74	0.37	0.33	0.10	0.88	0.10	0.03	0.03	97.41	0.05	0.15		United States of America
1K160930Y	201617706	6061	0.74	0.37	0.32	0.10	0.88	0.09	0.03	0.03	97.44	0.05	0.15		United States of America
1K161006D	201617706	6061	0.72	0.37	0.31	0.10	0.90	0.10	0.03	0.03	97.43	0.05	0.15		United States of America

SCM products are melted and extruded in the USA

Print Date: 11/21/2016

MATERIAL RECEIPT INSPECTION FORM

MATERIAL 17-4 R.750
DATE: 17/01/27

PO / BATCH NO 35031/136697

MATERIAL CERT REC'D: YES
QUANTITY RECEIVED: 14.20
QUANTITY INSPECTED: 14.20
QUANTITY REJECTED: _____

THICKNESS ORDERED: .750
THICKNESS RECEIVED: .750
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL	(Y) N	17-4
CORRECT THICKNESS	(Y) N	.750
PHOTO REQUIRED	Y (N)	
CORRECT MATERIAL	(Y) N	AMS 5643
CORRECT REF # TO LINK CERT	(Y) N	HEAT # 800644
CORRECT MATERIAL IDENTIFICATION	(Y) N	17-4 R.750
CORRECT M# ON THE MATERIAL	(Y) N	M136697
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC-18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>17</u> <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>14</u> <u>17/01/27</u> 9-89	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL 41303 RD.500
DATE 17/01/27

PO / BATCH NO.: 35031/138697

MATERIAL CERT REC'D yes
QUANTITY RECEIVED 24'
QUANTITY INSPECTED: 24'
QUANTITY REJECTED _____

THICKNESS ORDERED .500
THICKNESS RECEIVED .500
SHEET SIZE ORDERED _____
SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	303
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	.500
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	ASTM A582
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	HEAT# 428558
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	41303 RD.500
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	M136697
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>14</u>	SIGNED OFF BY: _____		
DATE: <u>17/01/27</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303 RD.750
DATE: 17/01/27

PO / BATCH NO.: 35031/136697

MATERIAL CERT REC'D: yes
QUANTITY RECEIVED: 12'
QUANTITY INSPECTED: 12'
QUANTITY REJECTED: _____

THICKNESS ORDERED: .750
THICKNESS RECEIVED: .750
SHEET SIZE ORDERED: _____
SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORROSION	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	
CORRECT MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	303
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	.750
PHOTO REQUIRED	Y <input type="radio"/> N <input checked="" type="radio"/>	
CORRECT MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	ASTM A582
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	HEAT # 1001
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	M303 RD.750
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/>	M136697
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK RECORD RESULTS BELOW				
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D

testers located in the Quality Office

QC-18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>17/01/27</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL 41303 R1.000
 DATE: 17/01/27

PO / BATCH NO.: 35031/136697

MATERIAL CERT REC'D yes
 QUANTITY RECEIVED 12'
 QUANTITY INSPECTED 12'
 QUANTITY REJECTED _____

THICKNESS ORDERED 1.00
 THICKNESS RECEIVED 1.00
 SHEET SIZE ORDERED _____
 SHEET SIZE RECEIVED _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORROSION	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>303</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>1.00</u>
PHOTO REQUIRED	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>ASTM A582</u>
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>HEAT# 428705</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>M303 R1.000</u>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	<u>M136697</u>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC-18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS 14</u> DATE: <u>17/01/27</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6 B.750X.125

PO / BATCH NO 35031/136697

DATE: 17/01/27

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 100'
 QUANTITY INSPECTED: 100'
 QUANTITY REJECTED: _____

THICKNESS ORDERED: .125
 THICKNESS RECEIVED: .125
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	N	<u>6061T6</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	N	<u>.125</u>
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y	N	<u>ASTM B221 AMS-QQ-A-200/8</u>
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	<u>HEAT # 429897-4</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	<u>M6061T6 B.750X.125</u>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	<u>M136697</u>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY:	<div style="text-align: center;">DAS 14</div>	SIGNED OFF BY:	
DATE:	<div style="text-align: center;">9-89 <u>17/01/27</u></div>	DATE:	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL M7075TLB7.00X2.00

PO / BATCH NO 35031/136697

DATE: 17/01/27

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 6.69
 QUANTITY INSPECTED: 6.69
 QUANTITY REJECTED: _____

THICKNESS ORDERED: 2.00
 THICKNESS RECEIVED: 2.080
 SHEET SIZE ORDERED: _____
 SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>7075TL</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>2.080</u>
PHOTO REQUIRED	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>AMS-00-A-25012</u>
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>FEATH 9346164</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>M7075TLB7.00X2.00</u>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>14136697</u>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK RECORD RESULTS BELOW				
	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (If required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>17/01/27</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6021T6B0.375x1.000

PO / BATCH NO.: P0 35031/130697

DATE: 17/02/02

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: 1.000 .375

QUANTITY RECEIVED: 12'

THICKNESS RECEIVED: .374

QUANTITY INSPECTED: 12'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	Y <input checked="" type="radio"/> N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	Y <input checked="" type="radio"/> N	
CORRECT MATERIAL	Y <input checked="" type="radio"/> N	actual Tle
CORRECT THICKNESS	Y <input checked="" type="radio"/> N	.374
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT MATERIAL	Y <input checked="" type="radio"/> N	AMS-220A-200/B
CORRECT REF # TO LINK CERT	Y <input checked="" type="radio"/> N	Heat # 201621178
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N	M6021T6B0.375x1.000
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/> N	M136697
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>48</u> DATE: <u>17/02/02</u>	SIGNED OFF BY: _____ DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M601TL6B2.000X1.250

PO / BATCH NO.: PO35031 / 136697

DATE: 17/02/02

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: 2.000 x 1.250

QUANTITY RECEIVED: 12'

THICKNESS RECEIVED: 2.012 x 1.261

QUANTITY INSPECTED: 12'

SHEET SIZE ORDERED: N/A

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL	(Y) N	<u>6061 TL6</u>
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT MATERIAL	(Y) N	<u>ASTM B221 / AMS G2A-200/8</u>
CORRECT REF # TO LINK CERT	(Y) N	<u>Heat # 201617706</u>
CORRECT MATERIAL IDENTIFICATION	(Y) N	<u>M601TL6B2.000X1.250</u>
CORRECT M# ON THE MATERIAL	(Y) N	<u>M 136697</u>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

DAS

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>48</u>	<u>9-89</u>	SIGNED OFF BY: _____	
DATE: <u>17/02/02</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6 B0.500 x 12.000 F

PO / BATCH NO: PO 35031 / M136697

DATE: 17-02-03

MATERIAL CERT REC'D: _____

THICKNESS ORDERED: _____

QUANTITY RECEIVED: _____

THICKNESS RECEIVED: _____

QUANTITY INSPECTED: _____

SHEET SIZE ORDERED: _____

QUANTITY REJECTED: _____

SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	<u>Z 120108199</u>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D
TYPE OF MATERIAL				
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: 38

SIGNED OFF BY: _____

DATE: FEB 03 2017

DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: H406176 80,500 X 0.600

PO / BATCH NO: P035081 M136697

DATE: 17-02-03

MATERIAL CERT REC'D: _____

THICKNESS ORDERED: _____

QUANTITY RECEIVED: _____

THICKNESS RECEIVED: _____

QUANTITY INSPECTED: _____

SHEET SIZE ORDERED: _____

QUANTITY REJECTED: _____

SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL	Y	N	
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT MATERIAL	Y	N	
CORRECT REF # TO LINK CERT	Y	N	
CORRECT MATERIAL IDENTIFICATION	Y	N	2016 21392
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D

testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: 36 9-88

SIGNED OFF BY: _____

DATE: FEB 03 2017

DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 16061TG B0.750Y.750

PO / BATCH NO: P035031 / 14136697

DATE: 17-02-03

MATERIAL CERT REC'D: _____

THICKNESS ORDERED: _____

QUANTITY RECEIVED: _____

THICKNESS RECEIVED: _____

QUANTITY INSPECTED: _____

SHEET SIZE ORDERED: _____

QUANTITY REJECTED: _____

SHEET SIZE RECEIVED: _____

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	201610858
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	


CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.
RECORD RESULTS BELOW

TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>3-88</u>	SIGNED OFF BY: _____		
DATE: <u>FEB 03 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

	Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 Tel: 613 632 9577 Fax: 613 632 1053
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PURCHASE ORDER

Purchase Order ID **PO35031**

Purchase Order Date 1/19/2017
PO Print Date 1/19/2017

Page Number 1 of 6

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAIL

JAN 19 2017

Contact Name Vendor Phone 905 669 9444 Ship To Contact Ship To Phone Ship Via: VENDOR'S TRUCK Ship Acct:	Buyer Customer POID Customer Tax # 10127-2607 Terms Net 30 Currency CAD FOB FCA - (Free Carrier)
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Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M174R0.750	17-4 round bar .750	1/25/2017		14.20 f	\$8.93	\$126.82
			Yes				
			1/25/2017				
		17-4PH/S17400/TYPE 630 SS ROUND BAR PER AMS 5643/ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR. MINIMUM YIELD TENSILE STRENGTH = 100KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI					

Line Total: \$126.82

2	M303R0.500	303 Round Bar 0.500"	1/25/2017		24.00 f	\$2.66	\$63.82
			Yes				
			1/25/2017				

MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

SCL

Line Total: \$63.82

JAN 27 2017

136

PO Instructions: NO PEC ST-8344

Note:

1/19/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35031**

Purchase Order Date 1/19/2017

PO Print Date 1/19/2017

Page Number 2 of 6

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

3	M303R0.750	303 Round Bar 0.750	1/25/2017	12.00	\$5.98	\$71.79
			Yes	f		
			1/25/2017			

MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

Line Total: \$71.79

4	M303R1.000	303 Round Bar 1.00	1/25/2017	12.00	\$9.08	\$108.99
			Yes	f		
			1/25/2017			

MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582

NOTE: AISI 304/316 NOT ACCEPTABLE

Line Total: \$108.99

5	M6061T6B0.375X01.000	6061T6 BAR .375 x 1.00	1/25/2017	12.00	\$4.58	\$55.00
			Yes	f		
			1/25/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

JAN 27 2017

PO Instructions: NO PEC ST-8344

Note:

1/19/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35031**

Purchase Order Date 1/19/2017

PO Print Date 1/19/2017

Page Number 3 of 6

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name
Vendor Phone 905 669 9444

Ship To Contact
Ship To Phone
Ship Via: VENDOR'S TRUCK
Ship Acct:

Buyer Chantal Lavoie
Customer POID
Customer Tax # 10127-2607
Terms Net 30
Currency CAD
FOB FCA - (Free Carrier)

6 M6061T6B0.500X06.000 / 6061-T6 Bar .500 x 6.00 1/25/2017
Yes
1/25/2017

12.00
f

Line Total: \$55.00

\$10.74 \$128.88

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

7 M6061T6B0.500X12.000 / 6061-T6 Bar .500 x 12.00 1/25/2017
Yes
1/25/2017

12.00
f

Line Total: \$128.88

\$21.23 \$254.75

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

JAN 27 2017
SP

Line Total: \$254.75

PO Instructions: NO PEC ST-8344

Note:

1/19/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35031**

Purchase Order Date 1/19/2017

PO Print Date 1/19/2017

Page Number 4 of 6

Order From :
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

VC-COP001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

8	M6061T6B0.750X00.750	6061-T6 Bar .750 x .750	1/25/2017	12.00	\$4.58	\$55.00
			Yes	f		
			1/25/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Line Total: \$55.00

9	M6061T6B00750X00.125	6061-T6 Bar .750 x .125	1/25/2017	100.00	\$0.55	\$55.00
			Yes	f		
			1/25/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

Line Total: \$55.00

10	M6061T6B2.000X01.250	6061-T6 Bar 2.00 x 1.25	1/25/2017	12.00	\$8.99	\$107.90
			Yes			
			1/25/2017			

MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR
AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR
ASTM B221

JAN 27 2017

PO Instructions: NO PEC ST-8344

Note:

1/19/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35031**

Purchase Order Date 1/19/2017

PO Print Date 1/19/2017

Page Number 5 of 6

Order From :
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

VC-COP001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 905 669 9444

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Total: \$107.90

11	M7075T6B7.000X2.000	7075-T6 BAR 7.000" X 2.000" (order in billets - 13.375")	1/30/2017	6.69	\$105.83	\$708.00
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Yes

1/30/2017

MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR
AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR
PER AMS-QQ-A-200/11 OR QQ-A-250/12 CUT FROM PLATE

NOTE: CUT 6 PCS AT 13.375", GRAIN DIRECTION ALONG 13.375"

Line Total: \$708.00

12	71401-45	PROCUREMENT QUALITY CLAUSES	1/25/2017	1.00	\$0.00	\$0.00
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No

1/25/2017

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

JAN 27 2017

PO Instructions: NO PEC ST-8344

Note:

1/19/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO35031**

Purchase Order Date 1/19/2017

PO Print Date 1/19/2017

Page Number 6 of 6

Order From : VC-COP001
THYSSENKRUPP MATERIALS CA LTD
O/A VPK METAL- C/O T27540/PO BOX 4275,POSTAL"A"
TORONTO, ON M5W 5V8
CA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	905 669 9444	Customer POID	
		Customer Tax #	10127-2607
Ship To Contact		Terms	Net 30
Ship To Phone		Currency	CAD
Ship Via:	VENDOR'S TRUCK	FOB	FCA – (Free Carrier)
Ship Acct:			

Line Total: \$0.00

PO Total: \$1,735.95

PO Instructions: NO PEC ST-8344

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 1/19/2017